

# North Dakota Health Careers

## *Content Standards*

Approved & Adopted  
September 2006



North Dakota Department of Career and Technical Education

Wayne Kutzer, State Director

600 E Boulevard Avenue, Dept. 270

Bismarck, North Dakota 58505-0610

[www.nd.gov/cte](http://www.nd.gov/cte)



The North Dakota State Board of Career and Technical Education has reviewed this standards document, approved the content, and officially adopted the material until 2010.

© Copyright by the North Dakota Department of Career and Technical Education, 600 East Boulevard Avenue, Department 270, Bismarck ND 58505-0610, <http://www.nd.gov/cte>

Permission to reproduce this material is granted for home, classroom, and workshop use. For all other purposes, please request permission in writing from the North Dakota Department of Career and Technical Education.

No person shall, on the basis of race, sex, color, national origin, religion, age or disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.



**North Dakota  
Health Careers  
Writing Team Members**

**Writing Team Members**

Don Roloff  
State Supervisor, Trade, Industry, Technical & Health Education  
ND Department of Career and Technical Education

Tony Scheerz  
Assistant Supervisor, Trade, Industry, Technical & Health Education  
ND Department of Career and Technical Education

Penny Veit-Hetletved  
Research and Curriculum Administrator  
ND Department of Career and Technical Education

Pat Axtman  
Williston High School  
502 W Highland Drive  
Williston, ND 58501-1407

Sue Grosz  
Bismarck High School  
800 North 8<sup>TH</sup> Street  
Bismarck, ND 58501-3997

Wanda Opland  
James Valley Area Career & Technical Center  
910 12<sup>TH</sup> Avenue NE  
Jamestown, ND 58401-6513

Kory Boehmer  
Lake Area Career & Technical Center  
205 16<sup>th</sup> Street NW  
Devils Lake, ND 58301-1597

Mary Ann Durick  
Bismarck State College  
PO BOX 5587  
Bismarck, ND 58506-5587

Pamela McFarland  
Richland County Career & Tech Center  
2101 9<sup>TH</sup> Street North  
Wahpeton, ND 58075-4399

# Table of Contents

Introduction.....	5
Definitions .....	5
Overview of Standards .....	6
Standards at a Glance.....	7
Standard with Topics .....	8
Standard 1: Academic Foundations .....	10
Academic Cross Walk .....	12
Standard 2: Communication .....	15
Academic Cross Walk .....	18
Standard 3: Systems.....	21
Academic Cross Walk .....	22
Standard 4: Employability Skills .....	25
Academic Cross Walk .....	29
Standard 5: Legal Responsibilities .....	31
Academic Cross Walk .....	33
Standard 6: Ethics .....	35
Academic Cross Walk .....	37
Standard 7: Safety Practices .....	39
Academic Cross Walk .....	44
Standard 8: Teamwork .....	46
Academic Cross Walk .....	48
Standard 9: Health Maintenance Practice.....	50
Academic Cross Walk .....	51
Standard 10: Technical Skills .....	56
Academic Cross Walk .....	58
Standard 11: Information Technology Application .....	61
Academic Cross Walk .....	63



## Introduction

### Goal

The North Dakota Department of Career and Technical Education is committed to working on standards to ensure that each program area can offer courses that allow students to acquire knowledge and skills. CTE not only provides technical skills and knowledge for students to succeed in careers, but also cross-functional workplace skills such as teamwork, problem solving, the ability to find and use information, and provide the context in which traditional educational goals and academic skills can be enhanced.

### Process

The standards process is one that directly involves the state supervisor(s), the curriculum administrator for this agency, and teachers working directly with the content at hand. Once the standards are written and expectations are clearly defined, the standards are then compared and ultimately aligned with national and industry standards.

### Academic Integration

The Department of Career and Technical Education strongly believes in the importance of academic integration within each program area. The standards produced for each program area will be cross walked with the most current academic drafts of English Language Arts, Mathematics, and Science. When possible, standards will be cross walked with other academic areas that correspond.



## Definitions

For each standard, there are one or more topic statements along with competencies for each topic. The competencies are categorized into three divisions: Introductory, Core, and Advanced. These divisions can further be defined as:

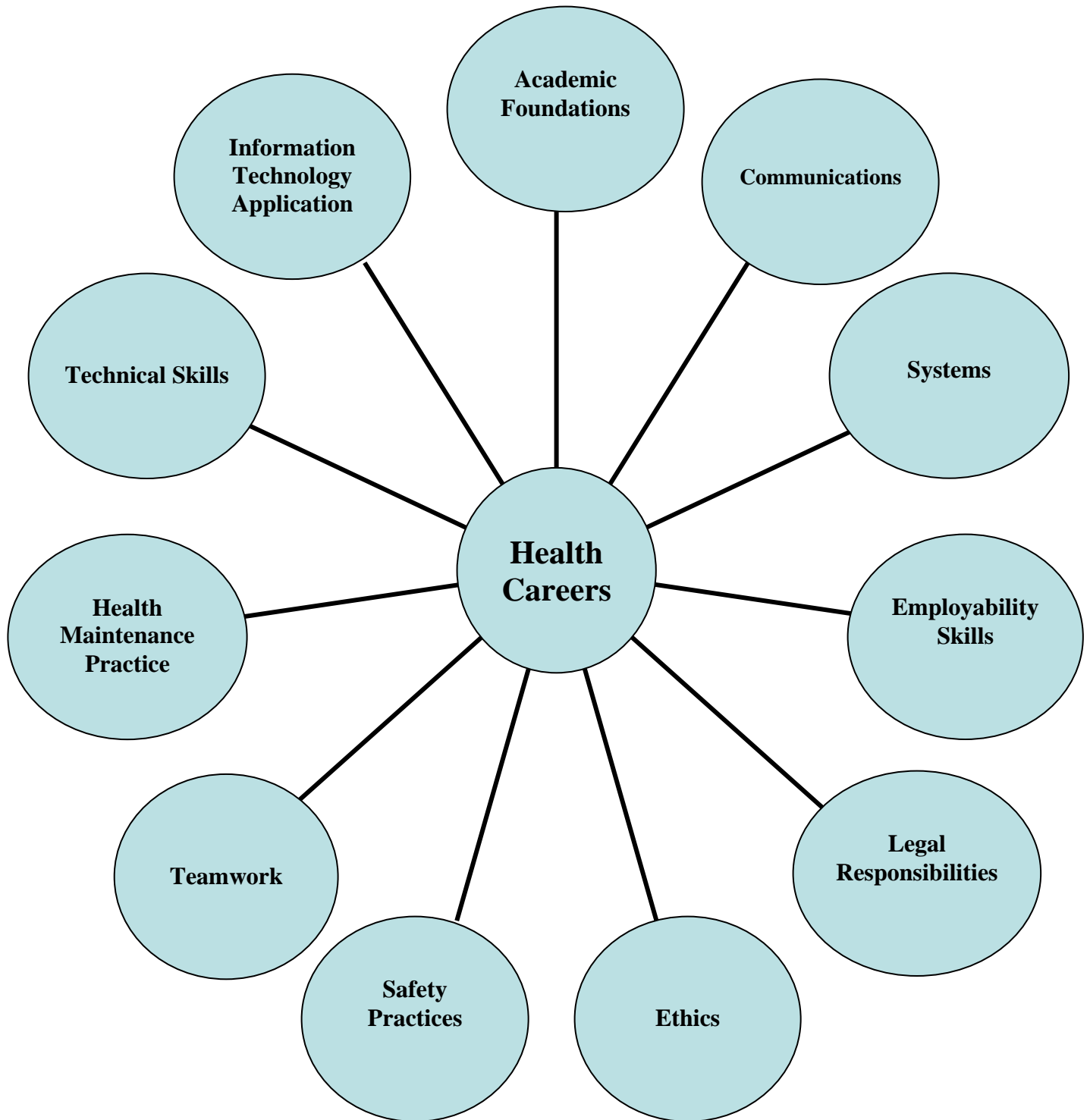
Introductory:	Knowledge Acquisition—Learners at this level expand awareness and build comprehension of knowledge.
---------------	---

Core:	Application—Learners at this level experience acquired knowledge by applying it to situations and self.
-------	---

Advanced:	Reflection—Learners at this level analyze, synthesize, judge, assess, and evaluate knowledge in accord with their own goals, values, and beliefs, and/or real situations.
-----------	---



## Overview of Standards



## Standards at a Glance

### COMPREHENSIVE STANDARDS

#### 1.0 ACADEMIC FOUNDATIONS

- Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.

#### 2.0 COMMUNICATION

- Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

#### 3.0 SYSTEMS

- Understand how the role of a health care worker relates to departments, organizations, and the overall health care environment. They will identify how key systems affect services performed and quality of care.

#### 4.0 EMPLOYABILITY SKILLS

- Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

#### 5.0 LEGAL RESPONSIBILITIES

- Understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting. They will perform their duties according to regulations, policies, laws and legislated rights of clients.

#### 6.0 ETHICS

- Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.

#### 7.0 SAFETY PRACTICES

- Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

#### 8.0 TEAMWORK

- Understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.

#### 9.0 HEALTH MAINTENANCE PRACTICE

- Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

#### 10.0 TECHNICAL SKILLS

- Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.

#### 11.0 INFORMATION TECHNOLOGY APPLICATION

- Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

---

## Standard with Topics

### CONTENT STANDARDS

---

#### 1.0 ACADEMIC FOUNDATIONS

- Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.
  - 1.1 Recognize Human Structure and Function.
  - 1.2 Analyze Diseases and Disorders

---

#### 2.0 COMMUNICATION

- Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.
  - 2.1 Practice Oral Communication.
  - 2.2 Demonstrate Written Communication.
  - 2.3 Utilize Electronic Communication.

---

#### 3.0 SYSTEMS

- Understand how the role of a health care worker relates to departments, organizations, and the overall health care environment. They will identify how key systems affect services performed and quality of care.
  - 3.1 Recognize Health Care Delivery System.

---

#### 4.0 EMPLOYABILITY SKILLS

- Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.
  - 4.1 Develop Employability Skills.
  - 4.2 Exercise Interpersonal Communications.
  - 4.3 Foster Personal Growth and Development.
  - 4.4 Participate in Career Decision-Making.

---

#### 5.0 LEGAL RESPONSIBILITIES

- Understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting. They will perform their duties according to regulations, policies, laws and legislated rights of clients.
  - 5.1 Relate Legal Implications to Health Careers.
  - 5.2 Use Legal Practices.

---

#### 6.0 ETHICS

- Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.
    - 6.1 Identify Legal and Ethical Boundaries.
    - 6.2 Exercise Ethical Practice.
-



---

**CONTENT STANDARDS CONTINUED...**

---

**7.0 SAFETY PRACTICES**

- Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.
- 7.1 Perform Infection Control.
- 7.2 Practice Personal Safety.
- 7.3 Recognize Environmental Safety.
- 7.4 Identify Common Safety Hazards.
- 7.5 Use Emergency Procedures and Protocols.

---

**8.0 TEAMWORK**

- Understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.
- 8.1 Participate in Healthcare Teams.
- 8.2 Engage in Team Member Participation.

---

**9.0 HEALTH MAINTENANCE PRACTICE**

- Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.
- 9.1 Describe Health Behaviors.

---

**10.0 TECHNICAL SKILLS**

- Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.
- 10.1 Implement Occupational Safety.
- 10.2 Learn Skills Development in Laboratory or Clinical Setting.

---

**11.0 INFORMATION TECHNOLOGY APPLICATION**

- Use information technology applications. They will demonstrate use as appropriate to healthcare applications.
  - 11.1 Utilize Communication Technology.
  - 11.2 Use Referencing Skills.
-

Standard 1: Academic Foundations – Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.

Topic 1: Recognize Human Structure and Function.

### *Student Competencies*

#### Introductory

- 1.1.1 Describe the basic structure and functions of cells, tissues, organs and systems across the life span.
- 1.1.2 Identify and describe the physical, emotional and social changes associated with each life stage and the stages of grieving.
- 1.1.3 Construct and define basic medical terminology suffixes, prefixes, roots and abbreviations.

#### Core

- 1.1.4 Explain body planes, quadrants, directional terms and cavities.
- 1.1.5 Analyze the interdependence of the body systems as they relate to wellness, disease, disorders, therapies and care rehabilitation.

### *Keys to Employability*

#### Basic Skills

- 1. Reading→ Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- 2. Writing→ Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- 3. Arithmetic/Mathematics→ Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- 4. Listening→ Receives, attends to, interprets, and responds to verbal messages and other cues.
- 5. Speaking→ Organizes ideas and communicates orally.

#### Thinking Skills

- 1. Creative Thinking→ Generates new ideas.
- 2. Decision Making→ Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
- 3. Problem Solving→ Recognizes problems and devises and implements plan of action.
- 4. Seeing Things in the Mind's Eye→ Organizes, processes symbols, pictures, graphs, objects, and other information.
- 5. Knowing How to Learn→ Uses efficient learning techniques to acquire and apply new knowledge and skills.
- 6. Reasoning→ Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

Standard 1: Academic Foundations – Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.

Topic 2: Analyze Diseases and Disorders

### *Student Competencies*

#### Introductory

- 1.2.1 Compare selected diseases and disorders: respective classifications, causes, diagnoses, therapies and care rehabilitation to include biotechnological applications.

### *Keys to Employability*

#### Technology

1. Select Technology → Chooses procedures, tools, or equipment, including computers and related technologies.
2. Applies Technology to Task → Understand overall intent and proper procedures for setup and operation of equipment.
3. Maintains and Troubleshoots Equipment → Prevents identifies, or solves problems with equipment, including computers, and other technologies.

#### Resources

1. Time → Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.
2. Money → Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
3. Material and Facilities → Acquires, stores, allocates, and uses materials or space efficiently.
4. Human Resources → Assesses skills and distributes work accordingly, evaluates performance and provides feedback.

#### Interpersonal

1. Participates as a Member of a Team → Contributes to group efforts.
2. Teaches Others New Skills.
3. Serves Client/Customers → Works to satisfy customer's expectations.
4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

Standard 1: Academic Foundations – Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.

## Academic Cross Walk

### English Language Arts

- 9.1.1 Choose a broad topic, state the problem, or question.
- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.1.4 Evaluate relevancy of information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.1.6 Summarize information.
- 9.1.7 Identify and avoid plagiarism.
- 9.1.9 Use graphic organizer.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.3.12 Use technology; e.g., publishing software and graphic programs, to present written work.
- 9.4.2 Use visual aides effectively in oral presentations.
- 9.4.3 Use notes and manuscripts to make oral presentations.
- 9.4.4 Engage in a group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 10.1.2 Know ways to effectively search electronic databases; e.g., defining key terms and using limiters to focus a search.
- 10.1.3 Gather reliable information to support a thesis.
- 10.1.4 Use relevant information.
- 10.1.5 Organize information from a variety of sources into a unified whole.
- 10.1.6 Use a style sheet, such as MLA or APA, for citing primary and secondary sources.
- 10.1.7 Paraphrase information.
- 10.1.9 Develop an outline.
- 10.1.10 Write a research paper.
- 10.1.11 Present research information; e.g., informative speech, PowerPoint presentation, video-presentation.
- 10.3.2 Defend a personal opinion using facts as support.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to a verbal message.
- 11.1.11 Research topics independently using appropriate sources.
- 11.1.2 Evaluate and incorporate information from primary sources; e.g., interviews and surveys.
- 11.1.4 Verify the quality, accuracy, and usefulness of information.
- 11.1.5 Synthesize information in a logical sequence
- 11.1.7 Evaluate the research process & develop strategies for improving it; e.g., correct use of research format, accuracy of research, organization of information & use of sources.

### English Language Arts – Cont.

- 11.2.4 Identify techniques used in persuasive writing including inductive reasoning and propaganda.
- 11.3.8 Incorporate visual aids (e.g., graphs, tables, and pictures) into written work to enhance meaning.
- 11.4.2 Adapt to a variety of speaking and listening situation such as formal presentations, oral interpretations, and group discussions.
- 12.1.1 Plan a research strategy.
- 12.1.2 Determine purpose; e.g., inform, persuade.
- 12.1.3 Develop a research question.
- 12.1.5 Evaluate the research process and apply strategies to a variety of writing purposes; e.g., correct use of research format, accuracy of research, organization of information and use of sources.
- 12.2.8 Use technical language/jargon to decipher meaning group discussions.

Standard 1: Academic Foundations – Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.

## Academic Cross Walk

### Mathematics

- 9-10.1.1 Express numbers between one-billionth and one billion in fraction, decimal, & verbal form; express numbers of all magnitudes in scientific notation.
- 9-10.1.4 Represent a set of data in a matrix.
- 9-10.1.8 Apply estimation skills to predict realistic solutions to problems.
- 9-10.1.9 Select and use a computational technique (i.e., mental calculation, paper-and-pencil, or technology) to solve problems involving real numbers.
- 9-10.1.11 Add, subtract, and perform scalar multiplication on matrices.
- 9-10.4.1 Select appropriate units and scales for problem situations involving measurement.
- 9-10.4.6 Employ estimation techniques to evaluate reasonableness of results in measurement situations.
- 9-10.5.8 Manipulate algebraic expressions and equations using properties of real numbers, e.g., simplify, factor.
- 9-10.5.12 Graphically represent the solution or solutions to an equation, inequality, or system.
- 9-10.5.13 Interpret a graphical representation of a real-world situation.
- 9-10.5.15 Approximate and interpret rates of change from graphical and numerical data.
- 11-12.1.7 Add, subtract, and multiply complex numbers.
- 11-12.1.8 Multiply matrices containing no more than three rows or columns without the use of technology situations involving measurement.

### Science

- 9-10.1.1 Explain how models can be used to illustrate scientific principles.
- 9-10.1.2 Describe the interaction of components within a system (e.g., interactions between living and non-living components of an ecosystem, interaction between organelles of a cell).
- 9-10.1.3 Explain how a system can be dynamic yet may remain in equilibrium (e.g., water cycle, rock cycle, population).
- 9-10.1.4 Describe the relationship between form and function (e.g., solids, liquids, gases, cell specialization, simple machines and plate tectonics).
- 9-10.1.5 Explain how classification can be based on the relationship between form and function (e.g., elements and compounds, biological classification, types of clouds).
- 9-10.1.6 Identify principles governing evolution and equilibrium within systems (e.g., cause and effect, positive and negative feedback).
- 9-10.2.1 Explain how scientific investigations can result in new ideas.
- 9-10.2.2 Use appropriate safety equipment and precautions during investigations (e.g., goggles, apron, eye wash stations).
- 9-10.2.3 Identify questions and concepts that guide scientific investigations.
- 9-10.2.5 Identify the independent and dependent variables, the control, and the constants when conducting an experiment.
- 9-10.2.6 Design and conduct a guided investigation.
- 9-10.2.7 Maintain clear and accurate records of scientific investigations.
- 9-10.2.8 Analyze data found in tables, charts and graphs to formulate conclusions.
- 9-10.3.2 Classify changes in matter as physical or chemical.
- 9-10.3.9 Compare and contrast electromagnetic & mechanical waves (i.e., energy, energy transfer, medium).
- 9-10.4.1 Relate cell function to cell structure (i.e., cell wall, cell membrane, nucleus, mitochondria, chloroplast).
- 9-10.4.2 Relate the functions of cells in multicellular organisms to their cell type (e.g., nerve cells, blood cells, guard cells).
- 9-10.4.4 Relate DNA, genes, and chromosomes.
- 9-10.4.5 Explain the relationship between spontaneous changes in DNA and a source of genetic variation.

Standard 1: Academic Foundations – Know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their student role. This includes reading, writing, mathematics, life sciences knowledge, using health care terminology, and being aware of the history of health care.

## Academic Cross Walk

### Science – Cont.

- 9-10.4.6 Compare & contrast the results of mitosis & meiosis (i.e., mitosis involves a nuclear division that results in two daughter nuclei that are identical to the parent nucleus; meiosis involves two nuclear divisions that result in gametes cells containing half the number of chromosomes).
- 9-10.4.7 Apply the basic concepts of genetics to predict inherited traits (i.e., segregation, independent assortment, dominant and recessive traits).
- 9-10.4.8 Relate the concept of natural selection to its evolutionary consequences.
- 9-10.5.3 Explain how energy in the Earth system is governed by convection, conduction, and radiation (e.g., heat moves in the Earth's mantle by convection, conduction occurs along the mid-oceanic ridges, energy from the Sun reaches the Earth through radiation).
- 9-10.6.1 Use appropriate technologies and techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills).
- 9-10.6.2 Explain how scientific principles have been used to create common technologies (e.g., household appliances, automotive parts, agricultural equipment, textiles, computers, Internet resources, CD-ROMs).
- 9-10.6.3 Explain how emerging technologies (e.g., genetic manipulations, biofuels, and hydrogen fuels) may impact society and the environment.
- 9-10.7.1 Explain how personal health is related to fitness, substance abuse, sexual activity, and nutrition.
- 9-10.7.2 Identify factors that affect populations (e.g., food webs, carrying capacity, overpopulations, disease, food supply, algal blooms, resources, conservation practices).
- 9-10.8.1 Identify the role of scientists in theoretical & applied science (e.g., careers, employment possibilities).
- 9-10.8.2 Identify the human characteristics that influence scientific advancement (e.g., intellectual honesty, openness, objectivity, curiosity, skepticism, ethical conduct, cooperation).
- 9-10.8.3 Explain how individuals and groups, from different disciplines in and outside of science, contribute to science at different levels of complexity).
- 9-10.8.4 Identify theories that have changed over time (e.g., alchemy, atomic structure, model of the solar system).
- 9-10.8.5 Explain how views & attitudes have influenced the development of science (e.g., religion, previous knowledge, cultural tradition, superstition, folklore legends).

### Health

- 12.2.1 Understand the interrelationships of intellectual, emotional, social, spiritual, and physical health throughout life.
- 12.2.4 Understand the social, political, and economic effects of disease on individuals, families and communities.
- 12.3.1 Know how the community, media, and technology can influence the health of individuals.
- 12.3.4 Know how public health policies and government regulations impact health-related issues.

Standard 2: Communication – Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

Topic 1: Practice Oral Communication.

## Student Competencies

### Introductory

- 2.1.1 Identify and demonstrate basic communication skills (observation, listening, verbal and nonverbal).
- 2.1.2 Apply active listening skills using reflection, restatement, and clarification techniques.
- 2.1.3 Demonstrate interviewing skills.
- 2.1.4 Interpret verbal and nonverbal behavior to augment communication.

### Core

- 2.1.5 Describe the impact of family, community, and other cultural diversity in the communication process.
- 2.1.6 Apply the elements of communication using the sender-receiver method.
- 2.1.7 Interpret and communicate using medical terminology.
- 2.1.8 Demonstrate courtesy to others, including self-introduction.

## Keys to Employability

### Personal Qualities

- 1. Responsibility → Exerts a high level of effort and perseveres towards goal attainment.
- 2. Self-Esteem → Believes in own self worth and maintains a positive view of self.
- 3. Sociability → applies it when solving a problem. friendliness, adaptability, empathy, and politeness in group setting.
- 4. Self-Management → Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
- 5. Integrity/Honesty → Chooses ethical courses of action.

### Systems

- 1. Understands Systems → Knows how social, organizational, and technological systems work and operates effectively with them.
- 2. Monitors and Corrects Performance → Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions.
- 3. Improves or Designs Systems → Suggests modifications to existing systems and develops new or alternative systems to improve performance. corrects malfunctions.

### Information

- 1. Acquires and Evaluates Information.
- 2. Organizes and Maintains Information.
- 3. Interprets and Communicates Information.
- 4. Uses Computers to Process Information.

Standard 2: Communication – Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

Topic 2: Demonstrate Written Communication.

### *Student Competencies*

#### Introductory

- 2.2.1 Report relevant information in order of occurrence in an objective and subjective manner.

#### Core

- 2.2.2 Organize, read, write, and compile technical information and summaries in clinical and classroom settings.
- 2.2.3 Use medical terminology within a scope of practice in order to interpret, transcribe and communicate information, data, and observations.

### *Keys to Employability*

#### Basic Skills

1. Reading → Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
2. Writing → Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
3. Arithmetic/Mathematics → Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
4. Listening → Receives, attends to, interprets, and responds to verbal messages and other cues.
5. Speaking → Organizes ideas and communicates orally.

#### Thinking Skills

1. Creative Thinking → Generates new ideas.
2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
3. Problem Solving → Recognizes problems and devises and implements plan of action.
4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.



Standard 2: Communication – Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

Topic 3: Utilize Electronic Communication.

### *Student Competencies*

#### Core

- 2.3.1 Utilize HIPAA guidelines when handling health sensitive information through technology in a healthcare setting.

### *Keys to Employability*

#### Technology

1. Select Technology → Choose procedures, tools, or equipment, including computers and related technologies.
2. Applies Technology to Task → Understand overall intent and proper procedures for setup and operation of equipment.
3. Maintains and Troubleshoots Equipment → Prevents identifies, or solves problems with equipment, including computers, and other technologies.

#### Resources

1. Time → Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.
2. Money → Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
3. Material and Facilities → Acquires, stores, allocates, and uses materials or space efficiently.
4. Human Resources → Assesses skills and distributes work accordingly, evaluates performance and provides feedback.

#### Interpersonal

1. Participates as a Member of a Team → Contributes to group efforts.
2. Teaches Others New Skills.
3. Serves Client/Customers → Works to satisfy customer's expectations.
4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

Standard 2: Communication – Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

## Academic Cross Walk

### English Language Arts

- 9.1.1 Choose a broad topic, state the problem, or question.
- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.1.4 Evaluate relevancy of information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.1.6 Summarize information.
- 9.1.7 Identify and avoid plagiarism.
- 9.1.9 Use graphic organizer.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.3.2 Write descriptive and narrative compositions; e.g., journals, personal letters, biographies, short stories, autobiographical sketches, one-act plays, and poetry.
- 9.3.12 Use technology; e.g., publishing software and graphic programs to present written work.
- 9.4.1 Analyze the audience & adjust message & wording to suit purpose.
- 9.4.2. Use visual aides effectively in oral presentations.
- 9.4.3 Use notes and manuscripts to make oral presentations.
- 9.4.4 Engage in a group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 9.6.2 Use conventions of grammar related to parts of speech; i.e., verb tense and agreement.
- 9.6.3 Use conventions of punctuation.
- 10.1.1 Form questions to focus research.
- 10.1.2 Know ways to effectively search electronic databases; e.g., defining key terms and using limiters to focus a search.
- 10.1.3 Gather reliable information to support a thesis.
- 10.1.4 Use relevant information.
- 10.1.5 Organize information from a variety of sources into a unified whole.
- 10.1.6 Use a style sheet, such as MLA or APA, for citing primary and secondary sources.
- 10.1.7 Paraphrase information.
- 10.1.9 Develop an outline.
- 10.1.10 Write a research paper.
- 10.1.11 Present research information; e.g., informative speech, PowerPoint presentation, video presentation.
- 10.3.2 Defend a personal opinion using facts as support.
- 10.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to a verbal message.
- 11.1.4 Verify the quality, accuracy and usefulness of information.

### English Language Arts – Cont.

- 11.1.5 Synthesize information in a logical sequence.
- 11.1.7 Evaluate the research process and develop strategies for improving it; e.g., correct use of research format, accuracy of research, organization of information and use of sources.
- 11.3.8 Incorporate visual aids (e.g., graphs, tables, and pictures) into written work to enhance meaning.
- 11.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.4.2 Adapt to a variety of speaking and listening situations such as formal presentations, oral interpretations, & group discussions.
- 11.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 12.1.1 Plan a research strategy.
- 12.1.2 Determine purpose; e.g., inform, persuade.
- 12.1.3 Develop a research question.
- 12.1.5 Evaluate the research process & apply strategies to a variety of writing purposes; e.g., correct use of research format, accuracy of research, organization of information & use of sources.
- 12.2.8 Use technical language/jargon to decipher meaning.
- 12.3.1 Write business or other formal documents, including resumes, scholarship letters, and letters of inquiry or complaint.
- 12.4.1 Evaluate audience based on social characteristics; e.g., religion, culture, and gender.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentation.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.
- 12.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.

Standard 2: Communication – Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

## Academic Cross Walk

### Mathematics

None

### Science

- 9-10.2.2 Use appropriate safety equipment & precautions during investigations (e.g., goggles, apron, eye wash station).
- 9-10.2.6 Design and conduct a guided investigation.
- 9-10.2.7 Maintain clear and accurate records of scientific investigations.
- 9-10.4.1 Relate cell function to cell structure (i.e., cell wall, cell membrane, nucleus, mitochondria, chloroplast).
- 9-10.4.2 Relate the functions of cells in multicellular organisms to their cell type (e.g., nerve cells, blood cells, guard cells).
- 9-10.4.4 Relate DNA, genes, and chromosomes.
- 9-10.4.8 Relate the concept of natural selection to its evolutionary consequences.
- 9-10.6.1 Use appropriate technologies and techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills).
- 11-12.2.2 Select & use appropriate instruments, measuring tools, and units of measure to improve scientific investigations.
- 11-12.2.3 Use data from scientific investigations to accept or reject a hypothesis.
- 11-12.2.5 Use technology and mathematics to improve investigations and communications.
- 11-12.2.6 Analyze data using appropriate strategies (e.g., interpolation, and extrapolation of data, significant figures, dimensional analysis).
- 11-12.2.8 Communicate and defend a scientific argument.
- 11-12.4.1 Explain the importance of cell differentiation in the development of tissues, organs, organ systems, and multicellular organisms.
- 11-12.4.2 Explain how types of DNA technology (e.g., genetic engineering, forensic science, cloning) may impact society now and in the future.
- 11-12.4.3 Explain how change through time has ensured adaptation to changing environments.
- 11-12.6.1 Select and use appropriate technologies, tools & techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills, CBL, graphing calculators).
- 11-12.6.3 Explain how designing and implementing technology requires weighing trade-offs between positive and negative impacts on humans and the environment.
- 11-12.7.4 Explain how science & technology can influence personal, industrial, & cultural decision-making.

Standard 2: Communication – Know the various methods of giving and obtaining information. They will communicate effectively orally, in writing, and electronically.

### *Academic Cross Walk*

#### *Health*

- 12.3.2 Understand how cultural diversity enriches and challenges health behaviors.
- 12.5.3 Know possible causes of conflicts in schools, families and communities and strategies to prevent conflict in these situations.
- 12.5.4 Know how refusal, negotiation, and collaboration skills can be used to avoid potentially harmful situations.
- 12.7.1 Know how to express information and opinions about health issues.
- 12.7.2 Know how individuals can improve or maintain community health.
- 12.7.3 Know how to influence and support others in making positive health choices.
- 12.7.4 Know how to work cooperatively when advocating for healthy communities.

Standard 3: Systems – Understand how the role of a health care worker relates to departments, organizations, and the overall health care environment. They will identify how key systems affect services performed and quality of care.

Topic 1: Recognize Health Care Delivery System.

### *Student Competencies*

#### Core

- 3.1.1 Identify and describe history, evolution, and trends of the health care delivery system model.
- 3.1.2 Analyze and predict how factors such as cost, managed care, technology, aging population, access to care, alternative therapies, lifestyle, and behavior changes may affect various healthcare delivery models.
- 3.1.3 Identify the basic health care career clusters or pathways (i.e. therapeutic, diagnostic, health informatics, support services, and biotechnology, research and development.)

### *Keys to Employability*

#### Personal

- 1. Responsibility → Exerts a high level of effort and perseveres toward goal attainment.
- 2. Self-Esteem → Believes in own self worth and maintains a positive view of self.
- 3. Sociability → Demonstrates understanding, friendless, adaptability, empathy, and politeness in group setting.
- 4. Self-Management → Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
- 5. Integrity/Honesty → Chooses ethical courses of action.

#### Systems

- 1. Understands Systems → Knows how social, organizational, and technological systems work and operates effectively with them.
- 2. Monitors and Corrects Performance → Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions.
- 3. Improves or Designs Systems → Suggests modifications to existing systems and develops new

#### Information

- 1. Acquires and Evaluates Information.
- 2. Organizes and Maintains Information.
- 3. Interprets and Communicates Information.
- 4. Uses Computers to Process Information.

Standard 3: Systems – Understand how the role of a health care worker relates to departments, organizations, and the overall health care environment. They will identify how key systems affect services performed and quality of care.

## Academic Cross Walk

### English Language Arts

- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.1.4 Evaluate relevancy of information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.4 Engage in group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 10.1.4 Use relevant information.
- 11.2.10 Use etymology to define words.
- 12.2.8 Use technical language/jargon to decipher meaning.

### Health

- 12.2.4 Understand the social, political, and economic effects of disease on individuals, families and communities.
- 12.3.1 Know how the community, media & technology can influence the health of individuals.
- 12.3.4 Know how public health policies & government regulations impact health-related issues.
- 12.6.1 Know how to access health information, products, and services outside the community.
- 12.6.2 Know factors that influence personal selection of health care resources, products and services.
- 12.6.3 Know how to evaluate resources from home, school, and the community that present health information, products, and services.
- 12.6.4 Understand the cost & accessibility of a variety of health care services.
- 12.6.5 Know situations that require professional health services in the areas of prevention, treatment, and rehabilitation.
- 12.6.6 Know local, state, federal and private agencies that protect and/or inform the consumer.
- 12.7.4 Know how to work cooperatively when advocating for healthy communities.

Standard 3: Systems – Understand how the role of a health care worker relates to departments, organizations, and the overall health care environment. They will identify how key systems affect services performed and quality of care.

## Academic Cross Walk

### Science

- 9-10.1.1 Explain how models can be used to illustrate scientific principles.
- 9-10.1.2 Describe the interaction of components within a system (e.g., interactions between living and non-living components of an ecosystem, interaction between organelles of a cell).
- 9-10.1.5 Explain how classification can be based on the relationship between form and function (e.g., elements & compounds, biological classifications, types of clouds).
- 9-10.6.3 Explain how emerging technologies (e.g., genetic manipulations, biofuels, & hydrogen fuels) may impact society and the environment.
- 9-10.8.2 Identify the human characteristics that influence scientific advancement (e.g., intellectual honesty, openness, objectivity, curiosity, skepticism, ethical conduct, cooperation).
- 9-10.8.5 Explain how views & attitudes have influenced the development of science (e.g., religion, previous knowledge, cultural tradition, superstition, folklore legends).
- 11-12.1.1 Explain how scientists create and use models to address scientific knowledge.
- 11-12.1.2 Identify the structure, organization, and dynamics of components within a system (e.g., cells, tissue, organs, organ systems, reactants and products in chemical equilibrium).
- 11-12.1.5 Explain how classification can be based on the relationship between form and function (e.g., polar vs. nonpolar molecules, structure of periodic table, DNA vs. RNA).
- 11-12.4.2 Explain how types of DNA technology (e.g., genetic engineering, forensic science, cloning) may impact society now and in the future.
- 11-12.4.3 Explain how change through time has ensured adaptation to changing environments.
- 11-12.6.3 Explain how designing and implementing technology requires weighing trade-offs between positive and negative impacts on humans and the environment.

### Science – Cont.

- 11-12.7.4 Explain how science and technology can influence personal, industrial, and cultural decision-making (e.g., organ transplant, cloning, stem cell research genetic manipulation, use of genetic profile, archeological discoveries, land management, resource management).
- 11-12.8.1 Identify the criteria that scientific explanations must meet to be considered valid (e.g., must be based on consistent and repeatable data, be consistent with experimental and observational evidence about nature, make accurate predictions about systems being studied, be logical, report, methods and results, be open to question and reexamination, respect rules of evidence).

Standard 3: Systems – Understand how the role of a health care worker relates to departments, organizations, and the overall health care environment. They will identify how key systems affect services performed and quality of care.

## Academic Cross Walk

### Mathematics

- 9-10.1.8 Apply estimation skills to predict realistic solutions to problems.
- 9-10.1.9 Select and use a computational technique (i.e., mental calculations, paper-and-pencil, or technology) to solve problems involving real numbers.
- 11-12.1.7 Add, subtract, and multiple complex numbers.



Standard 4: Employability Skills – Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

Topic 1: Develop Employability Skills.

### *Student Competencies*

#### Introductory

- 4.1.1 Describe healthy lifestyles and compare with personal risk factors.
- 4.1.2 Interact appropriately and respectfully with diverse ethnic, age, cultural, religious, and socioeconomic groups in various.
- 4.1.3 Formulate solutions to problems using critical thinking skills (analyze, synthesize, evaluate) independently and in teams.
- 4.1.4 Develop a professional résumé to include educational and work experience, honors, awards, and other activities.

#### Core

- 4.1.5 Adopt personal and professional appearance and hygiene habits appropriate to the healthcare environment and industry expectations.
- 4.1.6 Demonstrate appropriate attitudes and behavior for healthcare workers.
- 4.1.7 Practice personal, professional, and leadership traits such as attendance, time management, etc. (employment and social situations).
- 4.1.8 Accept responsibility for one's own actions.
- 4.1.9 Evaluate work assignments and initiate actions with confidence that corresponds with the work assignment.
- 4.1.10 Observe and participate in career exploration, job shadowing, clinical activities and/or service learning.

### *Keys to Employability*

#### Basic Skills

- 1. Reading→ Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- 2. Writing→ Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- 3. Arithmetic/Mathematics→ Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- 4. Listening→ Receives, attends to, interprets, and responds to verbal messages and other cues.
- 5. Speaking→ Organizes ideas and communicates orally.

#### Thinking Skills

- 1. Creative Thinking→ Generates new ideas.
- 2. Decision Making→ Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
- 3. Problem Solving→ Recognizes problems and devises and implements plan of action.
- 4. Seeing Things in the Mind's Eye→ Organizes, processes symbols, pictures, graphs, objects, and other information.
- 5. Knowing How to Learn→ Uses efficient learning techniques to acquire and apply new knowledge and skills.
- 6. Reasoning→ Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

Standard 4: Employability Skills – Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

Topic 2: Exercise Interpersonal Skills.

### *Student Competencies*

#### Introductory

- 4.2.1 Interpret technical materials used for healthcare practices and procedures.

#### Core

- 4.2.2 Communicate in a straightforward, understandable, and timely manner.
- 4.2.3 Listen attentively to verbal instructions, requests, and other information to verify accuracy.
- 4.2.4 Provide written communication that is accurate and grammatically correct.

### *Keys to Employability*

#### Technology

1. Selects Technology → Chooses procedures, tools, or equipment, including computers and related technologies.
2. Applies Technology to Task → Understand overall intent and proper procedures for setup and operation of equipment.
3. Maintains and Troubleshoots Equipment → Prevents identifies or solves problems with equipment, including computers, and other technologies.

#### Resources

1. Time → Selects goal-relevant activities, ranks them, allocate time, and prepares and follows schedules.
2. Money → Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
3. Material and Facilities → Acquires, stores, allocates, and uses materials or space efficiently.
4. Human Resources → Assesses skills and distributes accordingly, evaluates performance and provides feedback.

#### Interpersonal

1. Participates as a Member of a Team → Contributes to group effort.
2. Teaches Others New Skills.
3. Serves Clients/Customers → Works to satisfy customers' expectations.
4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
5. Negotiates → Works toward agreements involving exchange of resources; resolves divergent interests.
6. Works with Diversity → Works well with men and women from diverse backgrounds.

Standard 4: Employability Skills – Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

Topic 3: Foster Personal Growth and Development.

### *Student Competencies*

#### Introductory

- 4.3.1 Show enthusiasm and commitment by meeting expectations and priorities of the organization.

#### Core

- 4.3.2 Manage time, prioritize responsibilities, and meet specified completion deadlines.
- 4.3.3 Engage in continuous self-assessment and goal modifications for personal and professional growth, including professional and community involvement.
- 4.3.4 Recognize constructive criticism or corrective action to resolve conflict.
- 4.3.5 Identify and demonstrate personal and professional traits and characteristics.

### *Keys to Employability – Cont.*

#### Personal Qualities

1. Responsibility → Exerts a high level of effort and perseveres towards goal attainment.
2. Self-Esteem → Believes in own self worth and maintains a positive view of self.
3. Sociability → Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group setting.
4. Self-Management → Assesses self accurately, sets personal goals, monitors progress, and exhibits self-Control.
5. Integrity/Honesty → Chooses ethical courses of action.

#### Systems

1. Understand Systems → Knows how social, organizational and technological systems work and operates effectively with them.
2. Monitors and Corrects Performance → Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and correct malfunctions.
3. Improves or Designs Systems → Suggests modifications to existing systems and develops new or alternative systems to improve performance.

#### Information

1. Acquires and Evaluates Information.
2. Organizes and Maintains Information.
3. Interprets and Communicates Information.
4. Uses Computers to Process Information.

Standard 4: Employability Skills – Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

Topic 4: Participate in Career Decision-Making.

### *Student Competencies*

#### Core

- 4.4.1 Identify and describe career specialties under health science career pathways: diagnostic, therapeutic, health informatics, support services, biotechnology research and development.
- 4.4.2 Explore a potential health science career in at least one of the following health science pathways: diagnostic, therapeutic, health informatics, support services, biotechnology, research and development.
- 4.4.3 Consider levels of education, credentialing requirements, employment opportunities, workplace environment, and future outlook for a career pathway.

Standard 4: Employability Skills – Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

## Academic Cross Walk

### English Language Arts

- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.1.4 Evaluate relevancy of information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 9.4.4 Engage in a group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 9.6.2 Use conventions of grammar related to parts of speech; i.e., verb tense and agreement.
- 9.6.3 Use conventions of punctuation.
- 10.1.4 Use relevant information.
- 10.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.6.1 Use conventions of grammar, usage and punctuation to edit and revise.
- 12.2.8 Use technical language/jargon to decipher meaning.
- 12.3.1 Write business or other formal documents, including resumes, scholarship letters, and letters of inquiry or complaint.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentations.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.
- 12.4.4 Use critical listening responses, such as refutation and commentary to critique the accuracy of messages.
- 12.6.1 Use conventions of grammar, use, and punctuation to edit and revise.

### Health

- 12.2.3 Know how to assess behaviors and their relationships to health promotion and disease prevention.
- 12.3.2 Understand how cultural diversity enriches and challenges health behaviors.
- 12.3.3 Understand how the physical environment influences the health of the community.
- 12.3.4 Know how public health policies and government regulations impact health-related issues.
- 12.5.4 Know how refusal, negotiation, and collaboration skills can be used to avoid potentially harmful situations.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.
- 12.7.1 Know how to express information and opinions about health issues.
- 12.7.2 Know how individuals can improve or maintain community health.
- 12.7.3 Know how to influence and support others in making positive health choices.
- 12.7.4 Know how to work cooperatively when advocating for healthy communities.

Standard 4: Employability Skills – Understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate skills that support and maintain job functions and upgrade these skills as needed.

## Academic Cross Walk

### Mathematics

- 9-10.1.4 Represent a set of data in a matrix.
- 9-10.1.8 Apply estimation skills to predict realistic solutions to problems.
- 9-10.1.9 Select and use a computational technique (i.e., mental calculation, paper-and-pencil, or technology) to solve problems involving real numbers.
- 11-12.1.7 Add, subtract, and multiply complex numbers.
- 11-12.3.1 Choose, construct and interpret a display to represent a set of data.
- 11-12.3.2 Make predictions based on the theoretical probabilities and experimental results.
- 11-12.3.3 Select, calculate, and use appropriate measures of central tendency and spread (i.e., mean, median, mode range, and quartiles) to draw meaningful conclusions about a set of data.

### Science

- 9-10.6.1 Use appropriate technologies and techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills).
- 9-10.6.2 Explain how scientific principles have been used to create common technologies (e.g., household appliances, automotive parts, agricultural equipment, textiles, fabrics, computers, Internet resources, CD-ROMs).
- 9-10.8.3 Explain how individuals and groups, from different disciplines in and outside of science, contribute to science at different levels of complexity.
- 9-10.8.4 Identify theories that have changed over time (e.g., alchemy, atomic structure, model of the solar system).
- 11-12.6.1 Select and use appropriate technologies, tools & techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills, CBL, graphing calculators).
- 11-12.6.2 Identify examples of how new technologies advance science.

Standard 5: Legal Responsibilities – Understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting. They will perform their duties according to regulations, policies, laws and legislated rights of clients.

Topic 1: Relate Legal Implications to Health Careers.

### *Student Competencies*

#### Introductory

- 5.1.1 Use problem solving techniques when confronted with legal dilemmas or issues.
- 5.1.2 Compare and contrast behaviors that could result in malpractice, liability, or negligence.

#### Core

- 5.1.3 Comply with facility policies and procedures.
- 5.1.4 Comply with established risk management criteria.
- 5.1.5 Determine when an incident is reportable.
- 5.1.6 Recognize legal responsibilities, scope of practice, and implications of actions.

### *Keys to Employability*

#### Basic Skills

- 1. Reading → Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- 2. Writing → Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- 3. Arithmetic/Mathematics → Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- 4. Listening → Receives, attends to, interprets, and responds to verbal messages and other cues.
- 5. Speaking → Organizes ideas and communicates orally.

#### Thinking Skills

- 1. Creative Thinking → Generates new ideas.
- 2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
- 3. Problem Solving → Recognizes problems and devises and implements plan of action.
- 4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
- 5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
- 6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

Standard 5: Legal Responsibilities – Understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting. They will perform their duties according to regulations, policies, laws and legislated rights of clients.

Topic 2: Use Legal Practices.

### *Student Competencies*

#### Introductory

- 5.2.1 Identify the legal implications that apply to documentation in healthcare records.

#### Core

- 5.2.2 Comply with standards of care relating to confidentiality, informed consent, and advanced directives.
- 5.2.3 Follow mandated standards for workplace safety (i.e. Occupational Safety and Health Administration (OSHA), Center for Disease Control (CDC).
- 5.2.4 Identify and comply with clients' rights, including confidentiality, according to the Patient's Rights and Health Insurance Portability and Accountability Act (HIPAA).

### *Keys to Employability*

#### Technology

1. Selects Technology → Chooses procedures, tools, or equipment, including computers and related technologies.
2. Applies Technology to Task → Understand overall intent and proper procedures for setup and operation of equipment.
3. Maintains and Troubleshoots Equipment → Prevents identifies or solves problems with equipment, including computers, and other technologies.

#### Resources

1. Time → Selects goal-relevant activities, ranks them, allocate time, and prepares and follows schedules.
2. Money → Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
3. Material and Facilities → Acquires, stores, allocates, and uses materials or space efficiently.
4. Human Resources → Assesses skills and distributes accordingly, evaluates performance and provides feedback.

#### Interpersonal

1. Participates as a Member of a Team → Contributes to group effort.
2. Teaches Others New Skills.
3. Serves Clients/Customers → Works to satisfy customers' expectations.
4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
5. Negotiates → Works toward agreements involving exchange of resources; resolves divergent interests.
6. Works with Diversity → Works well with men and women from diverse backgrounds.



Standard 5: Legal Responsibilities – Understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting. They will perform their duties according to regulations, policies, laws and legislated rights of clients.

## Academic Cross Walk

### English Language Arts

- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.1.4 Evaluate relevancy of information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.1 Analyze the audience and adjust message and word wording to suit purpose.
- 9.4.4 Engage in a group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 9.6.2 Use conventions of grammar related to parts of speech; i.e., verb tense and agreement.
- 9.6.3 Use conventions of punctuation.
- 10.1.4 Use relevant information.
- 10.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to a verbal message.
- 11.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 12.2.8 Use technical language/jargon to decipher meaning
- 12.3.1 Write business or other formal documents, including resumes, scholarship letters, and letters of inquiry or complaint.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentations.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.
- 12.4.4 Use critical listening responses, such as refutation & commentary, to critique the accuracy of messages.
- 12.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.

### Health

- 12.2.3 Know how to assess behaviors and their relationships to health promotion and disease preventions.
- 12.3.4 Know how public health policies and government regulations impact health-related issues.
- 12.4.1 Know how use, misuse, and abuse of alcohol, tobacco, and other drugs can play a role in dangerous behavior and can have adverse consequences for the community.
- 12.4.3 Know how to use a process in decision making as it relates to healthy lifestyles.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.
- 12.5.4 Know how refusal, negotiations, and collaboration skills can be used to avoid potentially harmful situations.
- 12.6.6 Know local, state, federal and private agencies that protect and/or inform the consumer.
- 12.7.3 Know how to influence and support others in making positive health choices.

Standard 5: Legal Responsibilities – Understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting. They will perform their duties according to regulations, policies, laws and legislated rights of clients.

### Academic Cross Walk

#### Mathematics

- 9-10.4.1 Select appropriate units and scales for problem situations involving measurements.
- 9-10.4.3 Use approximations to compare the standard and metric systems of measurement; e.g., a five-kilometer race is about three miles long).
- 9-10.4.4 Given a conversion factor, convert between standard and metric measurements.

#### Science

- 11-12.7.1 Explain the impact of environmental laws and policies on the environment and society (e.g., waste/pollutants from industry, carbon dioxide emissions, location and number of animals in a feedlot versus water supply).

Standard 6: Ethics – Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.

Topic 1: Identify Legal and Ethical Boundaries.

### *Student Competencies*

#### Introductory

- 6.1.1 Differentiate between ethical and legal issues impacting healthcare.
- 6.1.2 Contrast personal, professional and organizational values.

#### Core

- 6.1.3 Describe legal and ethical aspects of confidentiality.

### *Keys to Employability*

#### Interpersonal

- 1. Participates as a Member of a Team → Contributes to group effort.
- 2. Teaches Others New Skills.
- 3. Serves Clients/Customers → Works to satisfy customers' expectations.
- 4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, policies.
- 5. Negotiates → Works toward agreements involving exchange of resources; resolves divergent interests.
- 6. Works with Diversity → Works well with men and women from diverse backgrounds.

#### Personal Qualities

- 1. Responsibility → Exerts a high level of effort and preserves towards goal attainment.
- 2. Self-Esteem → Believes in own self worth and maintains a positive view of self.
- 3. Sociability → Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group setting.
- 4. Self-Management → Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
- 5. Integrity/Honesty → Chooses ethical course of action.

#### Systems

- 1. Understands Systems → Knows how social, organizational, and technological systems work and operates effectively with them.
- 2. Monitors and Corrects Performance → Distinguishes diagnoses deviations in systems' performance and corrects malfunctions.
- 3. Improves or Designs Systems → Suggests modifications to existing systems and develops new or alternative systems to improve performance.

Standard 6: Ethics – Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.

Topic 2: Exercise Ethical Practice.

### *Student Competencies*

#### Introductory

- 6.2.1 Identify and comply with the code of ethics as it relates to specific health care careers.

#### Introductory

- 6.2.2 Identify and comply with client bill of rights.  
6.2.3 Report any activity that adversely affects the health, safety or welfare of clients or fellow workers.

### *Keys to Employability*

#### Information

1. Acquires and Evaluates Information
2. Organizes and Maintains Information.
3. Interprets and Communicates Information.
4. Uses Computers to Process Information.

Standard 6: Ethics – Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.

## Academic Cross Walk

### English Language Arts

- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.4 Engage in group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 10.1.4 Use relevant information.
- 10.4.3 Formulate questions in response to a verbal message.
- 11.3.1 Gather information supporting multiple sides of an issue.
- 12.2.8 Use technical language/jargon to decipher meaning.
- 12.4.4 Use critical listening responses, such as refutation & commentary, to critique the accuracy of messages.

### Health

- 12.1.4 Understand physical, intellectual, social and cultural factors influence attitudes and behaviors regarding sexuality.
- 12.2.4 Understand the social, political, and economic effects of disease on individuals, families and the communities.
- 12.3.2 Understand how cultural diversity enriches and challenges health behaviors.
- 12.3.4 Know how public health policies and government regulations impact health-related issues.

Standard 6: Ethics – Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.

### Academic Cross Walk

#### Mathematics

None

#### Science

- 9-10.6.3 Explain how emerging technologies (e.g., genetic manipulation, biofuels, and hydrogen fuels) may impact society and the environment.
- 9-10.8.1 Identify the role of scientists in theoretical and applied science (e.g., careers, employment possibilities).
- 9-10.8.2 Identify the human characteristics that influence scientific advancement (e.g., intellectual honesty, openness, objectivity, curiosity, skepticism, ethical conduct, cooperation).
- 11-12.4.2 Explain how types of DNA technology (e.g., genetic engineering, forensic science, cloning) may impact society now and in the future.
- 11-12.6.3 Explain how designing and implementing technology requires weighing trade-offs between positive and negative impacts on humans and the environment.

Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

Topic 1: Perform Infection Control.

### *Student Competencies*

#### Introductory

- 7.1.1 Identify appropriate cleaning, disinfection, and sterilizing processes.

#### Core

- 7.1.2 Analyze methods to control the spread of pathogenic microorganisms.
- 7.1.3 Describe and demonstrate principles of infection control.
- 7.1.4 Describe and demonstrate standard precautions.
- 7.1.5 Demonstrate hand washing and following medical asepsis principles.
- 7.1.6 Contrast medical and surgical asepsis.

### *Keys to Employability*

#### Basic Skills

1. Reading → Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
2. Writing → Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
3. Arithmetic/Mathematics → Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
4. Listening → Receives, attends to, interprets, and responds to verbal messages and other cues.
5. Speaking → Organizes ideas and communicates orally.

#### Thinking Skills

1. Creative Thinking → Generates new ideas.
2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
3. Problem Solving → Recognizes problems and devises and implements plan of action.
4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

Topic 2: Practice Personal Safety.

### *Student Competencies*

#### Introductory

7.2.1 Apply principles of ergonomics.

#### Core

7.2.2 Apply principles of body mechanics.

7.2.3 Apply safety standards related to prevention of accidents and injuries.

7.2.4 Use personal protective equipment as appropriate to the environment.

7.2.5 Manage personal exposure incidents in compliance with facility policy and/or Occupational Safety and Health Administration (OSHA).

### *Keys to Employability*

#### Technology

1. Selects Technology → Chooses procedures, tools, or equipment, including computers and related technologies.
2. Applies Technology to Task → Understand overall intent and proper procedures for setup and operation of equipment.
3. Maintains and Troubleshoots Equipment → Prevents identifies or solves problems with equipment, including computers, and other technologies.

#### Resources

1. Time → Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.
2. Money → Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
3. Material and Facilities → Acquires, stores, allocates, and uses materials or space efficiently.
4. Human Resources → Assesses skills and distributes work accordingly, evaluates performance and provides feedback.



Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

Topic 3: Recognize Environmental Safety.

### *Student Competencies*

#### Introductory

- 7.3.1 Identify methods of fire and electrical hazard prevention in the health care setting.
- 7.3.2 Take appropriate action during a hazardous material incident.

#### Core

- 7.3.3 Apply safety principles within given environments to ensure client and worker safety.
- 7.3.4 Prevent accidents by using proper safety techniques.

### *Keys to Employability*

#### Interpersonal

- 1. Participates as a Member of a Team → Contributes to group effort.
- 2. Money → Uses or Prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
- 3. Serves Clients/Customers → Works to satisfy customer's expectations.
- 4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
- 5. Negotiates → Works toward agreements involving exchanging of resources, resolves divergent interests.
- 6. Works with Diversity → Works well with men and women from diverse backgrounds.

#### Personal Qualities

- 1. Responsibility → Exerts a high level of effort and preserves towards goal attainment.
- 2. Self-Esteem → Believes in own self worth and maintains a positive view of self.
- 3. Sociability → Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group setting.
- 4. Self-Management → Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
- 5. Integrity/Honesty → Chooses ethical course of action.

Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

Topic 4: Identify Common Safety Hazards.

### *Student Competencies*

#### Core

- 7.4.1 Identify the purpose of the Material Safety Data Sheets (MSDS).
- 7.4.2 Comply with safety signs, symbols, and labels.

### *Keys to Employability*

#### Systems

- 1. Understands Systems → Knows how social, organizational, and technological systems work and operates effectively with them.
- 2. Monitors and Corrects Performance → Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions.
- 3. Improves or Designs Systems → Suggests modifications to existing systems and develops new or alternative systems to improve performance.

#### Information

- 1. Acquires and Evaluates Information.
- 2. Organizes and Maintains Information.
- 3. Interprets and Communicates Information.
- 4. Uses Computers to Process Information.

Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

Topic 5: Use Emergency Procedures and Protocols.

### *Student Competencies*

#### Core

7.5.1 Respond to emergencies according to facility protocol.

Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

## Academic Cross Walk

### English Language Arts

- 8.4.3 Speak for different purposes; e.g., group discussions, research presentations and demonstrations.
- 8.4.4 Use volume, eye contact, rate, pronunciation, and articulation effectively in oral presentations.
- 9.1.2 Formulate a preliminary thesis statement.
- 9.1.3 Cross-reference information.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 9.4.4 Engage in a group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 10.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to verbal message.
- 12.2.8 Use technical language/jargon to decipher meaning.

### Health

- 12.1.4 Understand how physical, intellectual, social & cultural factors influences attitudes and behaviors regarding sexuality.
- 12.2.3 Know how to assess behaviors and their relationships to health promotion and disease prevention.
- 12.3.3 Understand how the physical environment influences the health of the community.
- 12.4.1 Know how use, misuse and abuse of alcohol, tobacco and other drugs can play a role in dangerous behavior and can have adverse consequences for the community.
- 12.4.3 Know how to use a process in decision making as it relates to a health lifestyle.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.
- 12.6.6 Know local, state, federal and private agencies that protect and/or inform the consumer.

Standard 7: Safety Practices – Understand the existing and potential hazards to clients, coworkers, and themselves. They will prevent injury or illness through safe work practices and will follow health and safety policies and procedures.

## Academic Cross Walk

### Mathematics

- 9-10.4.1 Select appropriate units and scales for problem situations involving measurements.
- 9-10.4.3 Use approximations to compare the standard and metric systems of measurements; e.g., a five-kilometer race is about three miles long.
- 9-10.4.4 Given a conversion factor, convert between standard and metric measurements.

### Science

- 9-10.2.1 Explain how scientific investigations can result in new ideas.
- 9-10.4.1 Relate cell function to cell structure (i.e., cell wall, cell membrane, nucleus, mitochondria, chloroplast).
- 9-10.4.2 Relate the functions of cells in multicellular organisms to their cell type (e.g., nerve cells, blood cells, guard cells).
- 9-10.7.1 Explain how personal health is related to fitness, substance abuse, sexual activity, and nutrition.
- 9-10.7.2 Identify factors that affect populations (e.g., food webs, carrying capacity, overpopulation, disease, food supply, algal blooms, resources, conservation practices).
- 11-12.2.1 Explain how new knowledge and methods emerge from different types of investigations and public communication among scientists.

Standard 8: TEAMWORK – Understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.

Topic 1: Participate in Healthcare Teams.

### *Student Competencies*

#### Introductory

- 8.1.1 Recognize characteristics of effective teams.
- 8.1.2 Discuss the team concept in providing quality care.

#### Introductory

- 8.1.3 Identify that compromise may be necessary to assure the best outcome.

### *Keys to Employability*

#### Basic Skills

1. Reading → Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
2. Writing → Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
3. Arithmetic/Mathematics → Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
4. Listening → Receives, attends to, interprets, and responds to verbal messages and other cues.
5. Speaking → Organizes ideas and communicates orally.

#### Thinking Skills

1. Creative Thinking → Generates new ideas.
2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
3. Problem Solving → Recognizes problems and devises and implements plan of action.
4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

Standard 8: Teamwork – Understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.

Topic 2: Engage in Team Member Participation.

### *Student Competencies*

#### Introductory

- 8.2.1 Communicate verbally, non-verbally, and in writing with team colleagues to assure the best results.
- 8.2.2 Apply corrective action to an acknowledged conflict situation.

#### Core

- 8.2.3 Act responsibly as a team member, completing assigned tasks in a timely, effective manner.
- 8.2.4 Exercise leadership skills.
- 8.2.5 Respect and value the diverse backgrounds, expertise and contributions of all team members to accomplish common goals.

### *Keys to Employability*

#### Thinking Skills

- 1. Creative Thinking → Generates new ideas.
- 2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
- 3. Problem Solving → Recognizes problems and devises and implements plan of action.
- 4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
- 5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
- 6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

#### Resources

- 1. Time → Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.
- 2. Money → Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
- 3. Material and Facilities → Acquires, stores, allocates, and uses materials or space efficiently.
- 4. Human Resources → Assesses skills and distributes work accordingly, evaluates performance and provides feedback.

Standard 8: Teamwork– Understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.

## Academic Cross Walk

### English Language Arts

- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 9.4.4 Engage in group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 10.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to verbal message.
- 11.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.4.2 Adapt to a variety of speaking and listening situations such as formal presentations, oral interpretations, and group discussions.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentations.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.

### Health

- 12.2.2 Understand the importance of regular physical examinations in detecting and treating disease early.
- 12.2.4 Understand the social, political, and economic effects of disease on individual, families, and communities.
- 12.3.1 Know how the community, media and technology can influence the health of individuals.
- 12.3.2 Understand how cultural diversity enriches and challenges health behaviors.
- 12.3.4 Know how public health policies and government regulations impact health-related issues.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.
- 12.5.1 Know the role of individual responsibility for enhancing health.
- 12.5.4 Know how refusal, negotiation and collaboration skills can be used to avoid potentially harmful situations.
- 12.7.1 Know how to express information and opinions about health issues.
- 12.7.3 Know how to influence and support others in making positive health choices.
- 12.7.4 Know how to work cooperatively when advocating for healthy communities.



Standard 8: Teamwork – Understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.

### Academic Cross Walk

#### Mathematics

None

#### Science

- 9-10.8.4 Identify theories that have changed over time (e.g., alchemy, atomic structure, model of the solar system).
- 11-12.2.4 Formulate and revise explanations based upon scientific knowledge and experimental data.
- 11-12.7.4 Explain how science and technology can influence personal, industrial, and cultural decision-making (e.g., organ transplants, cloning, stem cell research, genetic manipulation, use of genetic profile, archeological discoveries, land management, resource management).

Standard 9: Health Maintenance Practice - Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

Topic 1: Describe Health Behaviors.

### *Student Competencies*

#### Introductory

- 9.1.1 Identify behaviors that promote health and wellness, prevention of disease, and prevention of injury.
- 9.1.2 Advocate available preventative health screenings and examinations.
- 9.1.3 Identify safety practices as related to high-risk behaviors.
- 9.1.4 Evaluate the validity of alternative health practices.
- 9.1.5 Identify, describe and assess available health related services in the community that relate to disease prevention and health promotion.

### *Keys to Employability*

#### Interpersonal

- 1. Participates as a Member of a Team → Contributes to group effort.
- 2. Teaches Others New Skills.
- 3. Serves Clients/Customers → Works to satisfy customer's expectations.
- 4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

#### Personal Qualities

- 1. Responsibility → Exerts a high level of effort and perseveres towards goal attainment.
- 2. Self-Esteem → Believes in own self worth and maintains a positive view of self.
- 3. Sociability → Demonstrates understanding friendless, adaptability, empathy, and politeness in group setting
- 4. Self-Management → Assesses self accurately, sets personal goals, monitors progress and exhibits self-control.
- 5. Integrity/Honesty → Chooses ethical courses of action.

#### Systems

- 1. Understand Systems → Knows how social, organizational and technological systems work and operates effectively with them.
- 2. Monitors and Corrects Performance → Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunction.
- 3. Improves or Designs Systems → Suggest modifications to existing systems and develops new or alternative systems to improve performance.

Standard 9: Health Maintenance Practice – Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

## Academic Cross Walk

### English Language Arts

- 9.1.3 Cross-reference information.
- 9.1.4 Evaluate relevancy of information.
- 9.1.5 Organize information from a variety of sources; e.g., chronological.
- 9.1.6 Summarize information.
- 9.1.7 Identify and avoid plagiarism.
- 9.1.8 Use primary and secondary sources.
- 9.1.9 Use graphic organizer.
- 9.2.3 Differentiate between a variety of nonfiction genres; i.e., newspapers, magazines, electronic texts, biographies, reference materials, essays, and speeches.
- 9.2.6 Demonstrate oral reading fluency.
- 9.2.7 Access prior knowledge to interpret meaning.
- 9.2.8 Read for a variety of purposes & intents; e.g., to become life-long readers, to model forms of writing, etc.
- 9.2.15 Use decoding/encoding connotation and denotation.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.3.1 Write expository texts; e.g., essays, directions & letters.
- 9.3.2 Write descriptive and narrative compositions; e.g., journals, personal letters, biographies, short stories, autobiographical sketches, one-act plays, and poetry.
- 9.3.3 Develop a composition detailing an opinion.
- 9.3.4 Develop a focus for composition; e.g., a theme or unifying idea.
- 9.3.6 Elaborate ideas through word choice and description using grade-level vocabulary.
- 9.3.7 Organize and write compositions for self and family.
- 9.3.8 Use supporting details.
- 9.3.9 Use techniques of characterization in compositions; e.g., description, dialogue, interior monologue.
- 9.3.10 Edit and revise compositions for proper mechanics and grammar, syntax, diction, and order.
- 9.3.11 Arrange paragraphs in logical progression.
- 9.3.12 Use technology; e.g., publishing software and graphic programs, to present written work.
- 9.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 9.4.2 Use visual aides effectively in oral presentations.
- 9.4.3 Use notes and manuscripts to make oral presentations.
- 9.4.4 Engage in group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 9.5.1 Identify existing and developing media.
- 9.5.2 Access media (e.g., television, film, music, electronic databases, DVDs, comics, visual and performing arts, newspapers, & periodicals) for a variety of purposes.

### English Language Arts – Cont.

- 9.6.1 Identify conventions of grammar related to sentence structure; i.e., sentence reduction, parallel structure, elliptical clauses, conjunctions, and clausal and phrasal patterns.
- 9.6.2 Use conventions of grammar related to parts of speech i.e., verb tense and agreement.
- 9.6.3 Use conventions of punctuation.
- 9.6.5 Identify the use of sound patterns in language; i.e., alliteration, assonance, and consonance.
- 9.6.6 Interpret symbolism.
- 9.6.7 Locate cultural differences in language; i.e., colloquialisms, regional and ethnic dialects, and indigenous vocabulary.
- 9.6.8 Identify gender perspectives in language; i.e., biased language.
- 10.1.2 Know ways to effectively search electronic databases; e.g., defining key terms and using limiters to focus a search.
- 10.1.3 Gather reliable information to support a thesis
- 10.1.4 Use relevant information.
- 10.1.5 Organize information from a variety of sources into a unified whole.
- 10.1.6 Use a style sheet, such as MLA or APA, for citing primary and secondary sources.
- 10.1.7 Paraphrase information.
- 10.1.8 Use note cards.
- 10.1.9 Develop an outline.
- 10.1.10 Write a research paper.
- 10.1.11 Present research information; e.g., informative, speech, PowerPoint presentation, video presentation.
- 10.2.1 Summarize information from nonfiction genres.
- 10.2.3 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing etc.
- 10.2.7 Apply universal themes to real life situations.
- 10.3.1 Write expository texts including research papers.
- 10.3.2 Defend a personal opinion using facts as support.
- 10.3.3 Use prewriting techniques to generate ideas.
- 10.3.4 Organize the ideas and details of a composition according to purpose.
- 10.3.5 Elaborate ideas through word choice and description using grade-level vocabulary.
- 10.3.6 Organize & write compositions for school & peers.
- 10.3.7 Use a variety of supporting details.
- 10.3.8 Use language appropriate to the format of the composition.

Standard 9: Health Maintenance Practice – Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

## Academic Cross Walk

### English Language Arts- Cont.

- 10.3.9 Use precise language to describe people, places and things.
- 10.3.10 Use a specific point of view in composition.
- 10.3.11 Edit and revise compositions with attention to content.
- 10.3.12 Edit & revise compositions for consistent point of view.
- 10.3.13 Use knowledge of sentence structure and sentence construction to edit and revise text.
- 10.3.14 Use sentence reduction techniques to revise and edit compositions.
- 10.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to verbal message.
- 10.5.1 Identify existing and developing media.
- 10.5.2 Use media (e.g., television, film, music, electronic databases, videos, DVDs, comics, visual and performing arts, newspapers, and periodicals) for a variety of purposes.
- 10.5.3 Evaluate the portrayal of ethnicity and lifestyles media messages.
- 10.5.4 Analyze media messages.
- 10.6.1 Use conventions of grammar related to sentence structure; i.e., sentence reduction, parallel structure, elliptical clauses, conjunctions, and clausal and phrasal patterns.
- 10.6.5 Critique gender perspectives in language; i.e. biased language.
- 11.1.1 Research topics independently using appropriate sources.
- 11.1.2 Evaluate and incorporate information from primary sources; e.g., interviews and surveys.
- 11.1.3 Evaluate reliability, validity, comprehensiveness,
- 11.1.4 Verify the quality, accuracy, and usefulness of information.
- 11.1.5 Synthesize information in a logical sequence. author's bias, and author's expertise.
- 11.1.6 Use quotations effectively.
- 11.1.7 Evaluate the research process and develop strategies for improving it; e.g., correct use of research format, accuracy of research, organization of information and use of sources.
- 11.2.3 Analyze details, facts, and concepts from nonfiction genres.
- 11.2.6 Apply prior knowledge of content to interpret meaning of text.

### English Language Arts – Cont.

- 11.2.7 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 11.2.10 Use etymology to define words.
- 11.3.1 Gather information supporting multiple sides of an issue.
- 11.3.2 Organize the ideas and details of a composition according to purpose.
- 11.3.3 Elaborate ideas through word choice and description using grade-level vocabulary.
- 11.3.4 Organize & write compositions for town, city & state.
- 11.3.5 Use a variety of supporting details.
- 11.3.6 Use figurative language in writing.
- 11.3.8 Incorporate visual aids (e.g., graphs, tables, and pictures) into written work to enhance meaning.
- 11.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.4.2 Adapt to a variety of speaking and listening situations such as formal presentations, oral interpretations, and group discussions.
- 11.5.1 Identify existing and developing media.
- 11.5.2 Apply media (e.g., television, film, music, electronic databases, videos, DVDs, comics, visual and performing arts, newspapers, and periodicals) for a variety of purposes.
- 11.5.4 Evaluate the accuracy of details in media messages
- 11.5.5 Evaluate the impact of media messages on daily life and politics.
- 11.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 11.6.2 Apply the use of sound patters in language; i.e., alliteration, assonance, and consonance.
- 12.1.1 Plan a research strategy.
- 12.1.3 Develop a research question.
- 12.1.4 Defend research paper or project.
- 12.1.5 Evaluate the research process and apply strategies to a variety of writing purposes; e.g., correct use of research format, accuracy of research, organization of information and use of sources.
- 12.2.2 Critique details, facts, and concepts from nonfiction genres.
- 12.2.4 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 12.2.8 Use technical language/jargon to decipher meaning.

Standard 9: Health Maintenance Practice – Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

## Academic Cross Walk

### English Language Arts – Cont.

- 12.3.1 Write business or other formal documents, including resumes, scholarship letters, and letters of inquiry or complaint.
- 12.3.2 Write persuasive compositions, including structuring arguments logically, using rhetorical devices, defending positions with evidence, and addressing readers' concerns and biases; e.g., editorials, critical reviews.
- 12.3.3 Organize the ideas and details of a composition according to purpose.
- 12.3.4 Use variety of sources for supporting details.
- 12.3.5 Elaborate ideas through word choice and description using grade-level vocabulary.
- 12.3.8 Edit and revise compositions for standard writing conventions and appropriate tone.
- 12.3.9 Edit and revise compositions for unity, coherence, clarity, and fluency.
- 12.3.10 Edit and revise compositions with an awareness of parallel structures and proper verb tense and agreement.
- 12.3.11 Edit and revise compositions for the use of proper clausal and phrasal patterns.
- 12.4.1 Evaluate audience based on social characteristics; e.g., religion, culture, and gender.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentations.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.
- 12.4.4 Use critical listening responses, such as refutation and commentary, to critique the accuracy of messages.
- 12.5.1 Identify existing and developing media.
- 12.5.2 Create a media project for a purpose.
- 12.5.3 Evaluate instances of gender equity and political correctness in media messages.
- 12.5.4 Evaluate medial messages in their historical and/or cultural contexts and intended audience.
- 12.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 12.6.2 Apply figurative language; i.e., allusion, analogy, hyperbole, irony, personification, oxymoron, and paradox.

### Health

- 12.1.1 Understand the interrelationships of intellectual, emotional, social, spiritual and physical health throughout life.
- 12.1.2 Understand the interrelationships of family and individual health.
- 12.1.3 Understand physical, intellectual, social and spiritual changes that occur throughout life, and how these changes differ among individuals.
- 12.1.4 Understand how physical, intellectual, social and cultural factors influence attitudes and behaviors regarding sexuality.
- 12.1.5 Understand the impact of personal health behaviors on the functioning of body systems.
- 12.1.6 Understand the importance of prenatal and perinatal care of both mother and child.
- 12.2.1 Understand how the body's systems function to prevent or combat disease.
- 12.2.2 Understand the importance of regular physical examinations in detecting and treating disease early.
- 12.2.3 Know how to assess behaviors and their relationships to health promotion and disease prevention.
- 12.2.4 Know how public health policies and government regulations impact health-related issues.
- 12.3.1 Know how the community, media and technology can influence the health of individuals.
- 12.3.3 Understand how the physical environment influences the health of the community.
- 12.4.1 Know how use, misuse and abuse of alcohol, tobacco and other drugs can play a role in dangerous behavior & can have adverse consequences for the community.
- 12.4.2 Know how to set personal health goals and design a specific plan to enhance health for quality of life.
- 12.4.3 Know how to use a process in decision making as it relates to a healthy lifestyle.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.
- 12.5.1 Know the role of individual responsibility for enhancing health.
- 12.5.2 Know strategies to use for health enhancement.
- 12.6.1 Know how to access health information, products, and services outside the community.
- 12.6.2 Know factors that influence personal selection of health care resources, products, and services.
- 12.6.3 Know how to evaluate resources from home, school and the community that present health information, products, and services.

Standard 9: Health Maintenance Practice – Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

## Academic Cross Walk

### Health – Cont.

- 12.6.4 Understand the cost and accessibility of a variety of health care services.
- 12.6.5 Know situations that require professional health services in the areas of prevention, treatment and rehabilitation.
- 12.6.6 Know local, state, federal, and private agencies that protect and/or inform the consumer.
- 12.7.1 Know how to express information and opinions about health issues.
- 12.7.2 Know how individuals can improve or maintain community health.
- 12.7.3 Know how to influence and support others in making positive health choices.
- 12.7.4 Know how to work cooperatively when advocating for healthy communities.

### Mathematics

None.

Standard 9: Health Maintenance Practice – Understand the fundamentals of wellness and the prevention of disease processes. They will be encouraged to practice preventative health behaviors.

## Academic Cross Walk

### Science

- 9-10.7.1 Explain how personal health is related to fitness, substance abuse, sexual activity, and nutrition.
- 9-10.7.2 Identify factors that affect populations (e.g., food webs, carrying capacity, overpopulations, disease, food supply, algal blooms, resources, conservation practices).
- 11-12.7.1 Explain the impact of environmental laws and policies on the environment and society (e.g., waste/pollutants from industry carbon dioxide emissions, location and number of animals in a feedlot versus water supply).
- 11-12.7.4 Explain how science and technology can influence personal, industrial, and cultural decision-making (e.g., organ transplants, cloning, stem cell research genetic manipulation, use of genetic profile, archeological discoveries, land management, resource management).

Standard 10: Technical Skills – Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.

Topic 1: Implement Occupational Safety.

### *Student Competencies*

#### Core

- 10.1.1 Perform standard precautions as described in the rules and regulations set forth by the Occupational Safety and Health Administration (OSHA).
- 10.1.2 Demonstrate and apply safety procedures to protect clients, coworkers, and self.
- 10.1.3 Obtain cardiopulmonary resuscitation (CPR) and first aid certificate of completion.

### *Keys to Employability*

#### Information

- 1. Acquires and Evaluates Information.
- 2. Organizes and Maintains Information.
- 3. Interprets and Communicates Information.
- 4. Uses Computers to Process Information.

#### Basic Skills

- 1. Reading → Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- 2. Writing → Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- 3. Arithmetic/Mathematics → Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- 4. Listening → Receives, attends to, interprets, and responds to verbal messages and other cues.
- 5. Speaking → Organizes ideas and communicates orally.

#### Thinking Skills

- 1. Creative Thinking → Generates new ideas.
- 2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
- 3. Problem Solving → Recognizes problems and devises and implements plan of action.
- 4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
- 5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
- 6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.



Standard 10: Technical Skills – Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.

Topic 2: Learn Skills Development in Laboratory or Clinical Setting.

### *Student Competencies*

#### Introductory

- 10.2.1 Identify skills related to activities of daily living.
- 10.2.2 Identify skills associated with rehabilitative care, such as range of motion, positioning, ambulation, transfer and transport of clients safely.
- 10.2.3 Review the structure and composition of the client records.
- 10.2.4 Identify the processes for collection and dissemination of healthcare data.
- 10.2.5 Calculate mathematical problems and measurements common to healthcare.

#### Core

- 10.2.6 Observe client during care and procedures.
- 10.2.7 Measure and report client vital signs and other indicators of health status.
- 10.2.8 Record and report client health information according to facility protocol as allowed.
- 10.2.9 Report abnormal results.
- 10.2.10 Identify and collect appropriate supplies and equipment necessary for a procedure.
- 10.2.11 Report need for equipment maintenance.
- 10.2.12 Explain procedures to the client.
- 10.2.13 Identify and describe therapeutic diets.
- 10.2.14 Demonstrate skills related to activities of daily living.
- 10.2.15 Demonstrate skills associated with rehabilitative care, such as range of motion, positioning, ambulation, transfer and transport of clients safely.

### *Keys to Employability*

#### Technology

- 1. Select Technology → Chooses procedures, tools or equipment, including computers and related technologies.
- 2. Applies Technology to Task → Understand overall intent and proper procedures for setup and operation of equipment.
- 3. Maintains and Troubleshoots Equipment → Prevents identifies, or solves problems with equipment, including computers, and other technologies.

#### Resources

- 1. Time → Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.
- 2. Money → Uses or prepares budget, make forecasts, keeps records, and makes adjustments to meet objectives.
- 3. Material and Facilities → Acquires skills and distributes work accordingly, evaluates performance and provides feedback.

#### Interpersonal

- 1. Participants as a Member of a Team → Contributes to group efforts.
- 2. Teaches Others New Skills.
- 3. Serves Clients/Customers → Works to satisfy customer's expectations.
- 4. Exercises Leadership → Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
- 5. Negotiates → Works toward agreements involving exchanges of resources, resolves divergent interests.
- 6. Works with Diversity → Works well with men and women from diverse backgrounds.

Standard 10: Technical Skills – Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.

## Academic Cross Walk

### English Language Arts

- 9.2.3 Differentiate between varieties of nonfiction genres; i.e., newspapers, magazines, electronic texts, biographies, reference materials, essays, and speeches.
- 9.2.6 Demonstrate oral reading fluency.
- 9.2.7 Access prior knowledge to interpret meaning.
- 9.2.8 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing etc.
- 9.2.15 Use decoding/encoding connotation and denotation.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 9.4.2 Use visual aides effectively in oral presentations.
- 9.4.3 Use notes and manuscripts to make presentations.
- 9.4.4 Engage in group discussion.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 9.5.1 Identify existing and developing media.
- 9.5.2 Access media (e.g., television, film, music, electronic databases, videos, DVDs, comics, visual and performing arts, newspapers, and periodicals) for a variety of purposes.
- 9.6.1 Identify conventions of grammar related to sentence structure, i.e., sentence reduction, parallel structure, elliptical clauses, conjunctions, and clausal and phrasal patterns.
- 9.6.2 Use conventions of grammar related to parts of speech; i.e., verb tense and agreement.
- 9.6.3 Use conventions of punctuation.
- 9.6.5 Identify the use of sound patterns in language; i.e., alliteration, assonance and consonance.
- 9.6.6 Interpret symbolism.
- 9.6.7 Local cultural differences in language; i.e., colloquialisms, regional and ethnic dialects, and indigenous vocabulary.
- 9.6.8 Identify gender perspectives in language; i.e., biased language.
- 10.2.1 Summarize information from nonfiction genres.
- 10.2.3 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 10.2.7 Apply universal themes to real life situations.
- 10.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 10.4.2 Use appropriate body language in oral presentations.

### English Language Arts – Cont.

- 10.4.3 Formulate questions in response to a verbal message.
- 10.5.1 Identify existing and developing media.
- 10.5.2 Use media (e.g., television, film, music, electronic databases, videos, DVDs, comics, visual and performing arts, newspapers, and periodicals) for a variety of purposes.
- 10.5.3 Evaluate the portrayal of ethnicity and lifestyles in media messages.
- 10.5.4 Analyze media messages.
- 10.6.1 Use conventions of grammar related to sentence structure; i.e., sentence reduction, parallel structure, elliptical clauses, conjunctions, and clausal and phrasal patterns.
- 10.6.5 Critique gender perspectives in language; i.e., biased language.
- 11.2.3 Analyze details, facts, and concepts from nonfiction genres.
- 11.2.6 Apply prior knowledge of content to interpret meaning of text.
- 11.2.7 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 11.2.10 Use etymology to define words.
- 11.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.4.2 Adapt to a variety of speaking and listening situations such as formal presentations, oral interpretations, and group discussion.
- 11.5.1 Identify existing and developing media.
- 11.5.2 Apply media (e.g., television, film, music, electronic databases, videos, DVDs, comics, visual and performing arts, newspapers, and periodicals) for a variety of purposes.
- 11.5.4 Evaluate the accuracy of details in media messages.
- 11.5.5 Evaluate the impact of media messages on daily life and politics.
- 11.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 11.6.2 Apply the use of sound patterns in language; i.e., alliteration, assonance, and consonance.
- 12.2.2 Critique details, facts and concepts from nonfiction genres.
- 12.2.4 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 12.2.8 Use technical language/jargon to decipher meaning.

Standard 10: Technical Skills – Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.

## Academic Cross Walk

### English Language Arts

- 12.4.1 Evaluate audience based on social characteristics; e.g., religion, culture and gender.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentations.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.
- 12.4.4 Use critical listening responses, such as refutation & commentary, to critique the accuracy of messages.
- 12.5.1 Identify existing and developing media.
- 12.5.2 Create a media project for a purpose.
- 12.5.3 Evaluate instances of gender equity and political correctness in media messages.
- 12.5.4 Evaluate media messages in their historical and/or cultural contexts and intended audience.
- 12.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 12.6.2 Apply figurative language; i.e., allusion, analogy, hyperbole, irony, personification, oxymoron, and paradox.

### Health

- 12.2.2 Understand the importance of regular physical examinations in detecting and treating disease early.
- 12.3.1 Know how the community, media and technology can influence the health of individuals.
- 12.4.3 Know how to use a process in decision making as it relates to a healthy lifestyle.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.

Standard 10: Technical Skills – Identify technical skills required for medical careers. They will demonstrate skills and knowledge as appropriate.

## Academic Cross Walk

### Mathematics

- 9-10.4.4 Given a conversion factor, convert between standard and metric measurements.
- 9-10.4.5 Use methods necessary to achieve a specified degree of precision and accuracy (i.e., appropriate number of significant digits) in measurement situations.
- 9-10.5.2 Express relations and functions using a variety of representations of the relations; e.g., table, graph, equation, set of ordered pairs.

### Science

- 9-10.2.1 Explain how science investigations can result in new ideas.
- 9-10.2.6 Design and conduct a guided investigation.
- 11-12.2.1 Explain how new knowledge and methods emerge from different types of investigations and public communication among scientists.
- 11-12.2.2 Select and use appropriate instruments, measuring tools and units of measure to improve scientific investigations.
- 11-12.2.5 Use technology and mathematics to improve investigations and communications.

Standard 11: Information Technology Application – Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

Topic 1: Utilize Communication Technology.

## Student Competencies

### Introductory

- 11.1.1 Use communication technology (fax, E-mail, Internet) to access and distribute data and other information as it applies to health care as well as HIPAA guidelines.
- 11.1.2 Identify adaptive communication techniques to accommodate individual needs.
- 11.1.3 Describe computer applications currently being used in today's healthcare.

### Core

- 11.1.4 Process data from various sources to reach conclusions.
- 11.1.5 Plan, prepare and deliver a presentation.

## Keys to Employability

### Personal Qualities

- 1. Responsibility → Exerts a high level of effort and perseveres towards goal attainment.
- 2. Self-Esteem → Believes in own self worth and maintain a positive view of self.
- 3. Sociability → Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group setting.
- 4. Self-Management → Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
- 5. Integrity/Honesty → Chooses ethical courses of action.

### Systems

- 1. Understand Systems → Knows how social, organizational and technological systems work and operates effectively with them.
- 2. Monitors and Corrects Performance → Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions.
- 3. Improves or Designs Systems → Suggests modifications to existing systems and develops new or alternative systems to improve performance.

### Information

- 1. Acquires and Evaluates Information.
- 2. Organizes and Maintains Information.
- 3. Interprets and Communicates Information.
- 4. Uses Computers to Process Information.

Standard 11: Information Technology Application – Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

Topic 2: Use Referencing Skills.

### *Student Competencies*

#### Introductory

- 11.2.1 Use procedure manuals and instruction booklets.
- 11.2.2 Determine validity of a resource.

#### Core

- 11.2.3 Demonstrate use of medical dictionaries, reference resources and Internet access.

### *Keys to Employability*

#### Basic Skills

1. Reading → Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
2. Writing → Communicates thoughts, ideas, information and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
3. Arithmetic/Mathematics → Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
4. Listening → Receives, attends to, interprets, and responds to verbal messages and other cues.
5. Speaking → Organizes ideas and communicates orally.

#### Thinking Skills

1. Creative Thinking → Generates new ideas.
2. Decision Making → Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.
3. Problem Solving → Recognizes problems and devises and implements plan of action.
4. Seeing Things in the Mind's Eye → Organizes, processes symbols, pictures, graphs, objects, and other information.
5. Knowing How to Learn → Uses efficient learning techniques to acquire and apply new knowledge and skills.
6. Reasoning → Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

Standard 11: Information Technology Application – Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

## Academic Cross Walk

### English Language Arts

- 9.2.3 Differentiate between a variety of nonfiction genres; i.e., newspapers, magazines, electronic texts, biographies, reference materials, essays, and speeches.
- 9.2.6 Demonstrate oral reading fluency.
- 9.2.7 Access prior knowledge to interpret meaning.
- 9.2.8 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 9.2.15 Use decoding/encoding, connotation, and denotation.
- 9.2.16 Build vocabulary by reading a variety of grade-level texts and applying new vocabulary.
- 9.3.1 Write expository texts; e.g., essays, directions, and letters.
- 9.3.2 Write descriptive and narrative compositions; e.g., journals, personal letters, biographies, short stories, autobiographical sketches, one-act plays, poetry.
- 9.3.3 Develop a composition detailing an opinion.
- 9.3.4 Develop a focus for composition; e.g., a theme or unifying idea.
- 9.3.6 Elaborate ideas through word choice and description using grade-level vocabulary.
- 9.3.7 Organize and write compositions for self and family.
- 9.3.8 Use supporting details.
- 9.3.9 Use techniques of characterization in compositions; e.g., description, dialogue, interior, monologue.
- 9.3.10 Edit and revise compositions for proper mechanics and grammar, syntax, diction, and order.
- 9.3.11 Arrange paragraphs in logical progression.
- 9.3.12 Use technology; e.g., publishing software and graphic programs, to present written work.
- 9.4.1 Analyze the audience and adjust message and wording to suit purpose.
- 9.4.2 Use visual aides effectively in oral presentations.
- 9.4.3 Use notes and manuscripts to make oral presentations.
- 9.4.4 Engage in group discussions.
- 9.4.5 Use critical listening skills; i.e., reflection.
- 9.6.1 Identify conventions of grammar related to sentence structure; i.e., sentence reduction, parallel structure, elliptical clauses, conjunctions, and clausal and phrasal patterns.
- 9.6.2 Use conventions of grammar related to parts of speech; i.e., verb tense and agreement.
- 9.6.8 Identify gender perspectives in language; i.e., biased language.
- 10.2.1 Summarize information from nonfiction genres.
- 10.2.3 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.

### English Language Arts – Cont.

- 10.2.7 Apply universal themes to real life situations.
- 10.3.1 Write expository texts including research papers.
- 10.3.2 Defend a personal opinion using facts as support.
- 10.3.3 Use prewriting techniques to generate ideas.
- 10.3.4 Organize the ideas and details of a composition according to purpose.
- 10.3.5 Elaborate ideas through word choice and description using grade-level vocabulary.
- 10.3.6 Organize & write compositions for school & peers.
- 10.3.7 Use a variety of supporting details.
- 10.3.8 Use language appropriate to the format of the composition.
- 10.3.9 Use precise language to describe people, places and things.
- 10.3.10 Use a specific point of view in compositions.
- 10.3.11 Edit and revise compositions with attention to content.
- 10.3.12 Edit and revise compositions for consistent point of view.
- 10.3.13 Use knowledge of sentence structure and sentence construction to edit and revise text.
- 10.3.14 Use sentence reduction techniques to revise and edit compositions.
- 10.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 10.4.2 Use appropriate body language in oral presentations.
- 10.4.3 Formulate questions in response to a verbal message.
- 10.6.1 Use conventions of grammar related to sentence structure; i.e., sentence reduction, parallel structure, elliptical clauses, conjunctions, and clausal and phrasal patterns.
- 10.6.5 Critique gender perspectives in language; i.e., biased language.
- 11.2.3 Analyze details, facts, and concepts from nonfiction genres.
- 11.2.6 Apply prior knowledge of content to interpret meaning of text.
- 11.2.7 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 11.2.10 Use etymology to define words.
- 11.3.1 Gather information supporting multiple sides of an issue.
- 11.3.2 Organize the ideas and details of a composition according to purpose.
- 11.3.3 Elaborate ideas through word choice and description using grade-level vocabulary.

Standard 11: Information Technology Application – Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

## Academic Cross Walk

### English Language Arts – Cont.

- 11.4.1 Analyze the audience and adjust message and wording to suit the purpose.
- 11.4.2 Adapt to a variety of speaking and listening situations such as formal presentations, oral interpretations, and group discussions.
- 11.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 11.6.2 Apply the use of sound patterns in language; i.e., alliteration, assonance, and consonance.
- 12.2.2 Critique details, facts, and concepts from nonfiction genres.
- 12.2.4 Read for a variety of purposes and intents; e.g., to become life-long readers, to model forms of writing, etc.
- 12.2.8 Use technical language/jargon to decipher meaning.
- 12.3.1 Write business or other formal documents, including resumes, scholarship letters, and letters of inquiry or complaint.
- 12.3.2 Write persuasive compositions, including structuring arguments logically, using rhetorical devices, defending positions with evidence, and addressing readers' concerns and biases; e.g., editorial, critical reviews.
- 12.3.3 Organize the ideas and details of a composition according to purpose.
- 12.3.4 Use variety of sources for supporting details.
- 12.3.5 Elaborate ideas through word choice and description using grade-level vocabulary.
- 12.3.8 Edit and revise compositions for standard writing conventions and appropriate tone.
- 12.3.9 Edit and revise compositions for unity, coherence, clarity and fluency.
- 12.3.10 Edit and revise compositions with an awareness of parallel structures and proper verb tense and agreement.
- 12.3.11 Edit and revise compositions for use of proper clausal and phrasal patterns.
- 12.4.1 Evaluate audience based on social characteristics; e.g. religion, culture, and gender.
- 12.4.2 Use tone, inflection, pitch, and emphasis effectively in oral presentations.
- 12.4.3 Analyze the audience and adjust message and wording to suit the audience while speaking.
- 12.4.4 Use critical listening responses, such as refutation and commentary, to critique the accuracy of messages.
- 12.6.1 Use conventions of grammar, usage, and punctuation to edit and revise.
- 12.6.2 Apply figurative language; i.e., allusion, analogy, hyperbole, irony, personification, oxymoron, and paradox.

### Health

- 12.3.1 Know how the community, media and technology can influence the health of individuals.
- 12.4.4 Know how to apply a problem-solving process to enhance and/or protect health.
- 12.6.1 Know how to access health information, products, and services outside the community.
- 12.6.3 Know how to evaluate resources from home, school, and the community that present health information, products and services.



Standard 11: Information Technology Application – Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

## Academic Cross Walk

### Mathematics

None

### Science

- 9-10.1.1 Explain how models can be used to illustrate scientific principles.
- 9-10.1.2 Describe the interaction of components within a system (e.g., interactions between living and non-living components of an ecosystem, interaction between organelles of a cell).
- 9-10.1.3 Explain how a system can be dynamic yet may remain in equilibrium (e.g., water cycle, rock cycle, populations).
- 9-10.1.4 Describe the relationship between form and function (e.g., solids, liquids, gases, cell specialization, simple machines, and plate tectonics).
- 9-10.1.5 Explain how classification can be based on the relationship between form and function (e.g., elements and compounds, biological classifications, types of clouds).
- 9-10.1.6 Identify principles governing evolution and equilibrium within system (e.g., cause and effect positive and negative feedback).
- 9-10.2.2 Use appropriate safety equipment and precautions during investigations (e.g., goggles, apron, eye wash station).
- 9-10.2.6 Design and conduct a guided investigation.
- 9-10.2.7 Maintain clear and accurate records of scientific investigations.
- 9-10.6.1 Use appropriate technologies and techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills).
- 9-10.6.2 Explain how scientific principles have been used to create common technologies (e.g., household appliances, automotive parts, agricultural equipment, textiles, fabrics, computers, Internet resources, CD-ROMs).
- 9-10.6.3 Explain how emerging technologies (e.g., genetic manipulation, biofuels, and hydrogen fuels) may impact society and the environment.
- 11-12.2.6 Analyze data using appropriate strategies (e.g., interpolation, and extrapolation of data, significant figures, dimensional analysis).
- 11-12.2.7 Design and conduct an independent investigation.
- 11-12.6.1 Select and use appropriate technologies, tools, and techniques to solve a problem (e.g., computer-assisted tools, Internet, research skills, CBL, graphing calculators).
- 11-12.6.2 Identify examples of how new technologies advance science.

Standard 11: Information Technology Application – Use information technology applications. They will demonstrate use as appropriate to healthcare applications.

## *Academic Cross Walk*

### *Science – Cont.*

- 11-12.8.1 Identify the criteria that scientific explanations must meet to be considered valid (e.g., must be based on consistent and repeatable data, be consistent with experimental and observational evidence about nature, make accurate predictions about systems being studied, be logical, report methods and results, be open to question and reexamination, respect rule of evidence),